

## **REMARKS**

Claims 1-28 and 42-55 remain in the application, non-elected claim 56 being canceled without prejudice.

All claims have been rejected over the prior art. In view of the foregoing amendments and the following Remarks, reconsideration is respectfully requested.

### **Independent Claim 1 and Dependent Claims 2-15**

Independent claim 1 has been rejected as being anticipated by both Reiss 4,032,028 and Degaetano 3,739,933.

It is axiomatic that, in order to "anticipate" a claim, "all the elements in the claim (or possibly their equivalents...) must have been disclosed in a single prior art reference or device." *Radio Steel & Mfg. Co. v. MTD Products, Inc.*, 731 F.2d 840, 845, 221 U.S.P.Q. 657, 661 (Fed. Cir. 1984). Moreover, "it is incumbent upon the Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1462 (BPAI 1990).

Amended claim 1 is directed to a child-resistant package that includes a container having at least one external thread and "pockets" (plural) on the external thread. A closure has at least one internal thread and "lugs" (plural) on the external thread. One of the threads has a circumferentially facing stop "extending axially from an end of said one thread." The other thread has an end with an abutment face for abutment with the stop to prevent over-tightening of the closure and over-compression of the spring.

Reiss discloses a safety cap arrangement in which the container neck 28 has an external thread 30 and a thread stop projection 34 "adjacent the terminus of thread 30

and spaced therefrom" (column 2, lines 30-31, emphasis added). The closure has an internal "thread which is comprised of three segments 36, 38 and 40" (column 2, lines 34-35). In addition, the closure has a pair of projections 42, 44, the projection 42 being part of the thread segment 38 and projection 44 being "spaced from and at substantially the same level as [thread] segment 40" (column 2, lines 38-39). Projection 34 on container neck 28 must be spaced from the end of external thread 30 so that closure projection 44 can be received between container projection 34 and the end 46 of the external thread, as best seen in FIGS. 4 and 5. It is also to be noted that it is the projection 44 that abuts projection 34, and not the end of the segmented internal thread on the closure (column 2, lines 44-46).

Amended claim 1 recites that one of the internal thread on the closure and the external thread on the container finish has a circumferentially facing stop "extending axially from an end of said one thread," and the other of the internal and external threads has an abutment face for abutment with the stop to prevent over-tightening of the closure on the finish and over-compression of the closure spring element. In Reiss, the stop projection 34 is clearly spaced from the thread end 46, and does not extend axially from an end of the thread 46 as required in amended claim 1. Furthermore, the segmented internal thread in Reiss does not have an abutment face for opposed engagement with projection 34, that function being performed by a separate projection 44 which is not part of the segmented internal thread. Thus, amended claim 1 clearly is not anticipated by Reiss.

Claim 1 is also rejected as being anticipated by Degaetano, with the Examiner referring specifically to the embodiment of FIGS. 15-16. The closure or cap 80 in Degaetano FIGS. 15 and 16 has no "internal thread," but rather has three angularly spaced

lugs 87 that cooperate with cam members 89 on the vial 81 to compress the spring member 82 and lock the lugs 87 into the notches 90. That is, the various packages illustrated in Degaetano are simply not thread-type packages. Furthermore, there is no circumferentially facing stop extending axially from an end of cam member 89. Indeed, there is nothing in Degaetano to prevent a user from compressing spring member 82 and causing lugs 87 to travel past notches 90. The Examiner suggests that the back surface of notch 90 somehow forms a stop. However, this surface does not prevent a user from compressing cap 80 against spring 82 and moving lugs 87 beyond notches 90. In any event, the back surface of notch 90 does not meet the limitations of amended claim 1. Thus, amended claim 1 clearly is not anticipated by Degaetano.

Dependent claims 2-15 are allowable both by reason of dependency from claim 1, which is itself allowable for reasons set forth above, and because of the additional novel limitations set forth therein. For example, amended dependent claim 2 recites that the axially extending stop extends from a lower end of the external thread on the container finish, and that the internal and external threads are continuous single threads that extend for at least 450°. As noted in the paragraph bridging pages 8 and 9 of the application text, this elongated thread dimension, which is greater than the dimension recommended by the Closure Manufacturers Association and the Society of the Plastics Industry, has the important advantage that the container may then be used with a non-child-resistant closure without jamming. That is, the thread on the non-child-resistant closure, which would typically be a 360° thread as recommended by the Closure Manufacturers Association and the Society of the Plastics Industry, will stop well short of and not jam on the thread stop on the container finish. The Examiner has rejected claim 2 as being obvious over Reiss

combined with German 2,625,875. First, neither Reiss nor the German reference discloses or suggests a package in which the container has a thread stop extending axially from the lower end of the external thread. Moreover, the German reference does not show a package in which either the internal thread on the closure or the external thread on the finish extends for at least 450°. Thus, the combination of Reiss and the German reference neither teaches nor renders obvious the subject matter of amended dependent claim 2.

Amended dependent claim 3 is rejected over the three-reference combination of Reiss, King 4,084,717 and Ladina 5,462,186. Dependent claim 3 recites that the axially extending stop extends from the upper end of the internal thread on the closure, and that the internal and external threads are dual threads with each extending for at least 180°. King is cited for alleged disclosure of a stop at the upper end of the internal thread on the closure, with the Examiner referencing in particular to elements 22 and 22a. However, the elements 22, 22a on the closure are “separate from the closure thread” (column 1, lines 44-45, emphasis added), and do not extend axially from an end of the closure thread. Just as important, the elements 22, 22a do not constitute an axially extending “stop,” but rather are “ratchet teeth” that cooperate with “ratchet portions” 40, 42 at the upper ends of the container external threads “to prevent removal of the closure from the container while the engagement is maintained” (column 1, lines 57-59). That is, the elements 22, 22a (and the diametrically opposed elements 26, 26a) are locking ratchets and not axially extending thread stops, as clearly shown in FIGS. 7 and 8 of the King reference. Thus, it is submitted that King teaches nothing combinable with Reiss relative to claim 3 of the present application. Ladina is cited merely for disclosure of dual threads in a container package, specifically a carbonated beverage container package and not even a child-resistant

package. In any event, Ladina adds nothing to the disclosures of Reiss and King, which are deficient relative to claim 3 for reasons discussed in detail above.

Claims 4-5 are rejected as being anticipated by Reiss, and are allowable for reasons set forth above in connection with amended independent claim 1. Likewise, amended dependent claim 6 is not anticipated by Reiss for reasons discussed above in connection with claim 1. It is again noted that the projection 34 in Reiss does not extend from the lower end of thread 30, but in fact is and must be spaced from the thread end 46.

Amended dependent claim 7 recites that the stop extends axially from the upper end of the at least one closure internal thread, and has been rejected over the combination and Reiss and King. As noted above in detail in connection with claim 3, King does not in any way disclose or suggest a thread stop extending axially from the upper end of the closure internal thread, but rather discloses ratchet teeth that are spaced from the upper end of the closure internal thread and perform a locking function in connection with ratchet lugs spaced from the upper end of the container external thread. Thus, claim 7 is clearly allowable over the combination of Reiss and King.

Dependent claim 8 is rejected as being anticipated by Degaetano, but is not anticipated by Degaetano for reasons discussed above in connection with claim 1. It is again noted in particular that the cam members 89 are not "external threads" on the container 81. Claim 8 is also rejected as being obvious over Reiss combined with the German reference. However, the German reference clearly discloses in connection with FIGS. 1-4 that the external thread openings extend entirely through the external thread, and that the upper surface of the thread is decidedly discontinuous. In the embodiment of FIGS. 5-8, pockets are formed in the internal thread on the closure rather than on the external

thread of the container, and the upper surface of the closure internal thread again is decidedly discontinuous, as is necessary to form the pockets. Thus, Reiss combined with the German reference clearly does not teach the subject matter of dependent claim 8.

Dependent claim 9 recites that the pockets (plural) on the container external thread and the lugs (plural) on the closure internal thread have opposed angulated cam surfaces to cam the lugs over the pockets during application of the closure, and opposed abutment surfaces to resist removal of the closure absent pressure on the spring element. Claim 9 has been rejected as being anticipated by Degaetano. This rejection is somewhat confusing in that, in rejecting claim 1 over Degaetano, the Examiner suggests that the back surface of the notch 90 in Degaetano FIGS. 15 and 16 forms a "stop," whereas claim 9 recites that the pockets and lugs have cam surfaces to allow the lugs to ride over the pockets during application of the closure. It is self-evident that the back surface of the notch 90 in Degaetano cannot function as a "stop" and at the same time form a cam surface that allows the lug 88 to ride over the notch. In point of fact, the Degaetano reference discloses a completely different type of child-resistant package - i.e., not a mating thread-type package of the type to which claims 1 and 9 are directed. The lugs 87 cannot cam over notches 90 in Degaetano unless pressure is applied to the cap 80, in which case of course the lugs 87 are pushed out of notches 90. There clearly are no "angulated cam surfaces" on either the lugs 87 or the notches 90 to perform the function recited in claim 9, any more than there is a stop extending axially from the cam element 89 in Degaetano to perform the function of the structure recited in claim 1.

Claim 9 is also rejected over the combination of Reiss and the German patent document. The German document shows a lug 124 on the closure internal thread that has

an angulated surface 125, although it is unclear whether this surface performs a “cam” function relative to the gap in the container external thread, as distinguished from merely camming part of the upper end of the container thread. That is, the German document drawings show only one external thread gap and one internal thread lug (as in Reiss). It would clearly not have been “obvious” to combine the German reference in this respect with the disclosure of Reiss because the thread lug 42 in Reiss is not required to pass the gap 48, 50 during application.

Dependent claim 10 recites that the closure, including the spring element, is of integrally molded plastic construction. Claim 11 further recites that the spring element comprises a circumferentially continuous conical lip extending radially and axially inwardly from the base wall adjacent to the skirt, with the lip tapering in thickness from the base wall to a free end of the lip. Claims 10 and 11 have been rejected as being anticipated by Degaetano. However, the embodiment of Degaetano FIGS. 15 and 16, on which the Examiner relies relative to parent claim 1, clearly shows that the spring element 82 is separate from the cap 80. Claims 10 and 11 are also rejected over the combination of Reiss, the German patent document and Davis 5,467,992. The Examiner refers in particular to the element 16 in Davis. However, as clearly shown in Davis FIG. 1, the several elements 16 are individual legs that extend from the base wall of the closure. In the modification of FIGS. 5 and 6, these legs are oriented in the radial rather than the circumferential direction to facilitate molding (column 4, lines 11-24). There is no circumferentially continuous conical lip in Davis extending radially and axially from the underside of the base wall, and the individual spring elements 16 in Davis FIGS. 5 and 6 extend radially outwardly rather than radially and inwardly as recited in claim 11.

Dependent claims 13-15 are rejected over the combination of Degaetano and Ou-Yang 4,935,273. However, Ou-Yang does not remedy the deficiencies of Degaetano discussed above.

**Independent Claim 16 and Dependent Claims 17-28**

Independent claim 16 is directed to a child-resistant closure and container package that includes a container having a finish with at least one external thread and pockets (plural) on an undersurface of the external thread that do not extend axially through the thread such that an upper surface of the external thread is continuous throughout the external thread. A closure has a base wall, a peripheral skirt with at least one internal thread and lugs (plural) on the internal thread for receipt in the pockets. The closure also has a spring element for engagement with the container finish to bias the closure away from the finish and urge the lugs into the pockets.

Claim 16 has been rejected as being anticipated by Degaetano. The Examiner refers in particular to the embodiment of Degaetano FIGS. 15 and 16. As noted above, the Degaetano reference in general, including particularly the embodiment of FIGS. 15 and 16, does not disclose a package that has "at least one external thread" on a container finish or "at least one internal thread" on a closure. The cam elements 89 in Degaetano are not external threads as that term is understood in the art. Furthermore, the cap 80 has nothing even remotely suggestive of an internal thread. The cap 80 merely has lugs 87 that cooperate with the cam elements 89 and the notches 90 on the cam elements. Note in this respect that claim 16 recites at least one internal thread and lugs on the internal thread. Note also that claim 16 recites "pockets" (plural) on the external thread and "lugs" (plural) on the internal thread. The cam elements 89 in Degaetano, in addition to not being



“threads,” each only have one notch 90. Thus, Degaetano clearly does not anticipate claim 16.

Claim 16 also has been rejected over Reiss combined with the German patent document. The external thread 30 in Reiss has a gap defined between thread ends 48, 50 in FIG. 4, which extends entirely through the thread. Likewise, in FIGS. 1-4 of the German patent document, the gap formed between thread segments 116, 117 in FIGS. 1-4 extends entirely through the thread. In the embodiment of FIGS. 5-8 of the German patent document, there are no pockets or notches of any type on the container external thread. Thus, neither the Reiss reference nor the German patent document discloses the subject matter of claim 16. What the references do not disclose individually, they cannot suggest in combination.

Dependent claims 17-28 are allowable both by reason of dependency from claim 16, which is itself allowable for reasons set forth above, and because of the additional novel limitations set forth therein.

Dependent claim 17 has been rejected as being anticipated by Degaetano, and as being obvious over the combination of Reiss and the German patent document. Claim 17 is allowable over these references for reasons discussed in detail above with respect to claim 9.

Likewise, amended dependent claims 18-20 are allowable over Reiss combined with the German patent document and/or King for reasons discussed in detail above in connection with claims 1, 6 and 7.

Likewise, dependent claims 23-28 are allowable over Reiss, the German patent document, Davis and Ou-Yang for reasons discussed above in connection with claims 10-15.

**Independent Claim 42 and Dependent Claims 43-49**

Amended independent claim 42 is directed to a closure that includes an integrally molded plastic body having: (a) a base wall, (b) a peripheral skirt, and (c) a spring element for engagement with a container finish. The peripheral skirt has at least one internal thread and lugs on an upper surface of the thread. Each lug has an angulated surface sloping toward an end of the thread remote from the base wall and a circumferentially facing radially extending abutment surface on an end of the lug facing an opposing end of the thread.

Claim 42 has been rejected as being anticipated by Reiss. Claim 42 as amended clearly is not anticipated by Reiss because: (1) Reiss does not disclose a closure that includes an integrally molded plastic body having a base wall, a peripheral skirt and a spring element. The resilient member 52 in Reiss is separate from the body of the cap 20. (2) The closure in Reiss does not have plural lugs on an upper surface of an internal thread. As noted in detail above, the internal closure thread in Reiss is a segmented thread consisting of segments 36, 38 and 40, best seen in FIGS. 4 and 5. There is only one lug 42 on this segmented thread. (3) The lug 42 clearly does not have an angulated surface sloping toward the lower end of the thread, - i.e., at the left end of lug 42 in FIGS. 4 and 5. Furthermore, as discussed in detail above in connection with claim 9, there would be no purpose in providing such an angulated surface on the lug 42 in Reiss because the lug 42

does not cam past the opening formed by thread ends 48, 50. Thus, claim 42 clearly is not anticipated by the Reiss patent.

Dependent claim 43 recites that the spring element of claim 42 comprises a circumferentially continuous conical lip that extends radially and axially inwardly from the base wall of the closure, with the lip tapering in thickness from the base wall to the free end of the lip for differential flexing upon engagement with the container finish. Claim 43 is rejected over Reiss in combination with Davis. However, as noted in detail above in connection with claim 11, Davis discloses a closure having circumferentially spaced separate elements 16, which extend circumferentially in FIG. 1 and radially outwardly in FIG. 5. Thus, the Davis reference, and therefore the combination of Reiss and Davis, does not suggest the structure of claim 43 because the spring element in Davis is not circumferentially continuous, and does not extend axially and radially inwardly from the base wall.

Dependent claim 44 recites that the at least one internal thread is a single thread that extends continuously for at least 450°. Claim 44 has been rejected over the combination of Reiss and Davis, neither of which even remotely suggests provision of an internal thread on a closure that extends continuously for at least 450°. The advantage afforded by this elongated thread length, well over accepted industry standards, is discussed above in connection with claim 2.

Dependent claim 47 recites that the at least one internal thread has a circumferentially facing axially extending stop projecting radially inwardly from the skirt and extending axially from an end of the thread adjacent to the base wall. Claim 47 has been rejected over the combination of Reiss and King. However, as noted in detail above in

connection with claim 3, King does not in any way disclose or suggest provision of a stop extending axially from an end of the thread adjacent to the base wall. Once again, the lugs 22, 22a do not form a “stop,” and do not “extend axially from an end of the thread” 20 adjacent to the base wall 14 in King.

#### **Independent Claim 50 and Dependent Claims 51-55**

Independent claim 50 is directed to a container that includes an integrally molded plastic body having a finish with at least one external thread and pockets on an undersurface of the thread. The pockets do not extend through the thread, such that an upper surface of the thread is continuous throughout the external thread.

Claim 50 has been rejected over the combination of Reiss and the German patent document. Reiss clearly discloses a container having an external thread with a gap formed by opposed ends 48, 50 (FIGS. 4 and 5) that extends entirely through the thread. Likewise, the German patent document clearly discloses a container external thread having a gap in FIGS. 1-4 that extends entirely through the thread, and having no external thread gap or pocket whatsoever in the embodiment of FIGS. 5-8. Inasmuch as neither reference discloses a container external thread having a pocket that does not extend through the thread, leaving a continuous upper thread surface, it follows that the combination of these references cannot disclose or suggest the subject matter of independent claim 50.

Claim 51 recites that the pockets on the external thread have angulated cam surfaces, which clearly is not the case in either of the Reiss and German patent documents cited relative to claim 51. See also the discussion above relative to claim 9.

Dependent claim 52 recites that the container finish has a circumferentially facing stop extending axially from a lower end of the external thread and projecting radially

outwardly from the finish. This claim is clearly allowable over the combination of Reiss and the German patent document for reasons discussed in detail above in connection with claims 1 and 2.

Dependent claim 53 recites that the at least one external thread has a flat circumferentially facing and radially extending end face at an upper end of the thread. This feature is neither disclosed nor suggested in Reiss or the German patent document cited relative to claim 53. Indeed, the German patent document clearly shows that the upper ends of the external threads are rounded, which is also shown in FIGS. 4 and 5 of Reiss. Furthermore, there is no reason to provide a flat abutment face at the upper ends of the container finish threads in Reiss or the German patent document because the upper ends of the threads in these documents do not cooperate with an opposing thread stop surface or the like on the associated closure.

Dependent claim 54 recites that the external thread on the container finish is a single thread that extends for at least 455°. As already noted in detail relative to claim 2, this feature is completely absent, by way of either disclosure or suggestion, in the Reiss and German patent documents cited relative to claim 54.

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It is therefore believed and respectfully submitted that all claims 1-28 and 42-55 remaining in the application are allowable at this time, and favorable action is respectfully solicited.

Please charge any fees associated with this submission to Acct. No. 15-0875

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Respectfully submitted,

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